Feature
Changing Systems? Welcome to the Slow Movement
By Christian Seelos
Applying a systemic lens to social problems does not generate quick and easy fixes. On the contrary, it forces us to slow down and tease out complex dynamics. I propose a framework to help guide such deeper reflection.

Changing Systems?
Welcome to the Slow Movement

BY CHRISTIAN SEELOS
Illustration by Alex Kiesling

There are no Robinson Crusoes in this world. We all live connected lives. We participate in families, communities, organizations, transportation systems, education systems, political systems, health systems, and so on. Though this point may be obvious, only recently have many philanthropic organizations come to embrace explicit system perspectives in their work. But what does it mean to make such a commitment?

System work seeks to address social problems by making substantive and lasting changes to the system in which the problems are embedded. Doing such work requires thinking about causal architecture. To reform a system necessitates understanding and then transforming the causal processes that constitute those systems.

This is hard work. There is no magic to changing systems, no waving of the wand. But investing in a system perspective can pay off greatly. Deeper reflection on a system’s architecture reduces our tendency to prematurely specify and enact solutions that are not effective or likely make situations worse. We thus employ resources more productively. We become more realistic about how much time is necessary to address problems and more humble and willing to explore and to learn, rather than to base decisions on the assumed superiority of our existing knowledge, technologies, and strategies.

System work gives organizations the opportunity to rethink their approaches and refresh their attitudes. Leaders may have better arguments to nurture long-term commitment to places and communities, instead of the exhausting fly-in, fly-out practices of Western philanthropic and development organizations. System work is not about solutions; it’s about discovering and steering local pathways for change at a pace appropriate for our ability to learn and for what local communities can enact and absorb. In what follows, I sketch some practical routes for adopting system perspectives for organizations that want to make their philanthropic work more effective.

PROLEGOMENA TO SYSTEMS THINKING
The field of philanthropy may enthuse over systems thinking, but it betrays confusion about systems, system perspectives, and their claim to objectivity. First, defining the boundaries of social systems is generally impossible. When we think of systems as relevant wholes, as is usually the case, we end up easily with the universe: Everything is somehow connected. Any problem context is influenced and relates to other problems, situations, and systems, and thus our inquiry expands the ecology of issues and problem defini-
tions, in the words of social scientist Werner Ulrich, “to the point where it might encompass God and the World.”

Needless to say, this is not a very practical approach. The practice of systems thinking, then, requires setting boundaries determined not only by the context of the problem discussed but also by our interests and needs.

In another example of common confusion about systems, practitioners tend to model systems “objectively,” with sophisticated system maps. But humans differ widely in their interpretation and experience of the same system, and so does their motivation for change or maintaining the status quo. Ultimately, we cannot map any one objective system or reality. System diagrams can greatly help groups articulate different views and capture assumptions, but they are less useful when their visual sophistication induces feelings of deep understanding and control that fuels a naïve overconfidence.

The complexity of such diagrams can be overwhelming for those who did not participate in the exercise. In 2009, when US General Stanley A. McChrystal saw a sophisticated system diagram of the social situation in Afghanistan, he famously remarked, “When we understand that slide, we’ll have won the war.”

Instead, a useful system perspective is sensitive to the fact that people hold various interpretations of situations, problems, and what can and ought to be done about them. Relaxing the assumption that systems exist objectively in the real world represents a big step forward. Progress comes from thinking about social problems in a systemic manner that does not privilege our biased perspectives. “A systems approach begins when first you see the world through the eyes of another,” the influential systems thinker C. West Churchman says.

These confusions about system thinking are not new; system perspectives enjoyed a turbulent journey in the last century. Scientists adopted system perspectives after becoming frustrated by the shortcomings of traditional analytical approaches and practices. Unfortunately, the current state of systems science is troubling. Research has branched out into a variety of efforts that are difficult to reconcile. Research perspectives are developed in isolation from each other, and findings are difficult to translate into practice. Already 50 years ago, the leading system pioneer, Austrian biologist Ludwig von Bertalanffy, expressed frustration with the state of systems practice:

If someone were to analyze current notions and fashionable catchwords, he would find “systems” high on the list. The concept has pervaded all fields of science and penetrated into popular thinking, jargon and mass media. … Professions and jobs have appeared in recent years which … go under names such as systems design, systems analysis, systems engineering. … Their practitioners are the “new utopians” of our time … at work creating a “New World,” brave or otherwise.

This assessment should serve as a warning regarding the current enthusiasm about systems approaches in the field of philanthropy. Given the state of system research, one wonders what might be the knowledge base that enables organizations to enact the promise of systems change.

To ground systems perspectives in contextual knowledge, some systems thinkers propose that, depending on the characteristics of systems, different systems warrant different types of system perspectives and work. Would this be a helpful perspective for practice? Let me turn to classifying the types of system perspectives available.

FOUR SYSTEM PERSPECTIVES

When most system thinkers and practitioners use the term “system” in philanthropy, they make two broad distinctions. The first is hard, versus soft/critical, system perspectives. This distinction marks differences in the assumptions they hold and the ways in which they look at systems:

- Hard system perspectives treat systems as real entities with defined boundaries that we can analyze objectively and improve with available knowledge and technologies to achieve uncontested objectives. Hard system perspectives seek to improve the performance of a system in a specific dimension.

- Soft/critical system perspectives treat systems as ways of thinking and reflecting about subjective images that people hold about social situations and perceived problems. This perspective seeks to explore differences in purpose, power, and voice; in opinions about what constitutes an improvement; and in evaluating the appropriateness of solutions. Soft/critical systems perspectives seek to shape an inquiry toward discovering motivations and options for progress. Even individuals or small organizations can mobilize local resources and work with a system.

The second distinction is organic, versus designed, systems:

- Designed systems refer to entities that are configured instrumentally to serve a specific purpose. Examples include task forces; organizations; functional systems, such as legal, health, and education systems; and governance mechanisms.

- Organic systems refer to social agglomerates, people who occupy a social or geographical space and relate as a result of informal social and historical processes. Examples include families, communities, tribes, villages, and societies.

We can map these distinctions onto a two-by-two diagram that sets out four system archetypes with examples: hard-designed, hard-organic, soft/critical-designed, and soft/critical-organic. (See “Four System Archetypes” on page 43.)

Such a rough classification can be a useful guide for further study. In an accompanying article, available on the website of the Stanford Center on Philanthropy and Civil Society (Stanford PACS), I draw on a decade of field research with prominent social enterprises in developing countries and offer examples of these four archetypes. However, Stanford PACS’ Global Innovation for Impact Lab, which I co-direct, also learns from contemporary initiatives such as Co-Impact, a global collaborative of funders and program partners. This January, Co-Impact announced one of the most ambitious system change initiatives to date: $80 million in grants to support bold system change initiatives over the next five years to improve education, health, and economic conditions.
opportunity for an estimated nine million people across Africa, South Asia, and Latin America. The initiatives are just starting to operate, and the rough categorization I offer here serves only to illustrate the different assumptions underlying the four archetypes. This classification does not capture the complexity of the approaches but will, I hope, facilitate reflection on the similarities and differences of several contemporary system change initiatives in the coming years.

**HARD SYSTEM PERSPECTIVES**

Contemporary system scholars argue that hard system perspectives make sense for situations characterized by well-understood problems. When stakeholders with decision-making power agree on what the problem is, on what constitutes success, and on the effectiveness and objectives of a proposed solution, then hard system approaches may offer a promising template for action.

**Designed hard system perspectives** | Co-Impact supports Teaching at the Right Level Africa (TaRL), which aspires to improve the performance of education systems in African countries. TaRL addresses a very specific aspect of the education system: improving basic reading and math skills of primary-school children in grades three to five. TaRL draws a clear boundary within the education system by focusing on a specific skill set and age range. Most stakeholders recognize the underlying problem of children’s underperforming in school and agree on the objectives and approach for improving skills. Improvements in math and reading performance can be assessed accurately. Pratham, the Indian NGO that pioneered the TaRL model; the Abdul Latif Jameel Poverty Action Lab, who has tested Pratham’s theory of change in randomized evaluations; and a collective of funders intend to support governments and local partners to implement a proven approach. Developing a detailed plan with prespecified resource requirements and performance milestones is also consistent with hard system perspectives.

A second example is Project ECHO India. ECHO implements a proven model of linking medical specialists with frontline health care providers through video technology to improve India’s health system. Like TaRL, ECHO builds on an existing program template that incorporates expertise developed in New Mexico, where ECHO started in 2003; it has since expanded to 37 countries. The initiative specifies at the outset uncontroversial objectives that it seeks to meet to improve the health system; ECHO draws a clear boundary around a set of health issues and locations with adequate technology infrastructure, and it invests the precise resources needed to achieve its defined milestones.

**Organic hard system perspectives** | Two civil wars and an Ebola crisis have left many communities in Liberia without access to health care. The Liberia Community Health Assistants Program (LCHAP) collaborates with the government of Liberia to train health workers for these communities, as a substitute for the lack of an effective health system. Each community represents a concrete social system, and LCHAP’s implementation relies mainly on providing specified resources and securing the robust commitment and consensus of powerful stakeholders. By standardizing practices in each community, the initiative could eventually integrate its trainees into the formal health system. LCHAP also reminds us that creating a new system is often easier than changing an existing one.

In the philanthropic sector, the adoption of hard system perspectives is more appealing, perhaps because they match important Western beliefs and biases, such as using expertise to solve problems, and employing formal strategies and plans with prespecified objectives. However, even mature health systems demonstrate striking differences in the worldviews of doctors, nurses, patients, the government, investors, and taxpayers. Stakeholders may disagree about whether a problem exists or what the most important one is. Or they may agree on the problem but disagree about causes and solutions, or about who should be in charge of improvements and how to evaluate progress or success. When philanthropic efforts focus successfully on one system aspect, powerful stakeholders may demand to redraw the boundaries of impact and include other system aspects. Or, as Pratham’s experience in India illustrates, improving one aspect of the education system may fuel inflated stakeholder expectations. Despite Pratham’s tremendous success and growth, the overall reading and math skills of youth in rural India have declined over the past decade. Associating Pratham wrongly with this lack of system-level impact may create tensions with the government.

Initiatives based on hard system premises are sensitive to even minimal deviations from their assumptions, particularly when strategies and funder expectations are formalized in clear plans that may constrain alternative courses of action when those plans fail. Robust change might require a more fundamental transformation of the architecture of the system to alter its tendency to re-create the same problems—an argument that the influential systems thinker Russell Ackoff made. Implementers may thus find out the hard way that a soft system approach, which by design deals with multiple contrasting objectives and tensions, may have been a more effective one, despite its being slower and less predictable.

Hard system perspectives have proven more appropriate for designing technical systems to achieve clear and observable objec-
and social problems, Sekem designed an open community for people founded in 1977 that I have followed over the past 15 years, offers a stark contrast to the complex reality of Egypt—the system Sekem intended to transform. "I wanted beauty and grace not just in addition to the company, but as an integral part from the start," says Sekem’s founder, Ibrahim Abouleish. Sekem developed a desert oasis that was beautifully landscaped with artistic touches and had a large amphitheater, plentiful shade trees, and flower gardens at every turn. "I wanted beauty and grace not just in addition to the companies, but as an integral part from the start," says Sekem’s founder, Ibrahim Abouleish. Sekem enabled people to express their individualism, to deliberate about roles, status, and preferences that people with different economic, cognitive, normative, and power/political factors that enable and constrain people’s thinking and acting? How does this architecture create situations of concern and their dynamics of change?

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The problem space, the subjective interpretation and evaluation of whether a situation is troubling, and for whom: What are the nature and legitimacy of claims that a situation is a social problem that ought to be dealt with? How important is this problem compared with other problems and priorities, and who benefits and who suffers most?

The perspective I offer here integrates the objective assumptions of hard system perspectives (situation spaces) and the subjective assumptions of soft/critical perspectives (problem spaces). The third dimension of this system perspective, behavioral architecture, is the main target of system change and equally applicable to designed and organic systems.

The three system dimensions do not exist independently. They are perspectives—ways of seeing, exploring, and intervening in social realities. This architecture challenges the traditional assumptions about the existence of boundaries, which herein represent choices that depend on interests in or passions for certain populations, geographies, or problems. Boundaries may pragmatically reflect available resources and competencies. Boundaries may signify one’s identity as a funder or implementer and where one draws the line of responsibility. As such, systems are situations of concern informed by the multiple perceived realities and interpretations of actors who seek to change the systems.

Let me explain each dimension in turn:

**Situation space** | A situation is a state of affairs of a system, the reality in which people find themselves. We can gather relevant facts about situations in terms of job opportunities, access to health or legal services, and abilities to participate in civic, economic, and political life. Situations also constrain people’s choices—e.g., high levels of illiteracy, pollution, addiction, hunger, crime, or discrimination. The term “space” indicates that we choose to pay attention to a slice of social reality, a particular situation at the level of someone who is discriminated against, a community that suffers from health issues, or a whole country that is held back by an abuse of power.

The balance of opportunities and constraints determines the dynamics by which a system changes: Is a situation slowly improving, and can this upward trend be accelerated? Is a situation stagnant, so that we need to find ways of mobilizing a departure from the status quo? Is a situation deteriorating, and do we need to figure out how to stabilize it and then direct the dynamics of change toward slowly improving it? By reflecting on these dynamics, we can become better informed about the priorities for designing an intervention and the ways in which we interact with systems.

Situation and observable facts present a superficial view of reality that can tempt us to take problems for granted and to apply ready-made solution templates, such as microfinance or smartphone-based apps. This attitude motivates reaching for shiny new technologies that may not substantively address the problem or that have unintended consequences. Consider, for example, the current tensions over Zipline, a California startup that uses drones as an efficient mechanism for getting medical supplies where and when they are needed in countries such as Ghana, Sierra Leone, and Rwanda. Despite the drones’ success, health professionals in those countries have also criticized their use, claiming they are expensive and deprioritize the development of other aspects of an effective health system.

System perspectives remind us to hold off on reaching for solutions. Instead, they encourage us to invest more time and effort in creative ways of exploring and appreciating the architecture of situations in a specific context and the various perspectives that local stakeholders have. System work is akin to identifying the essential pieces of a puzzle, understanding how systems are configured to do what they do, and only then devising pathways toward generating a different configuration that everyone sees as an improvement.

Interventions to improve situations face two fundamental challenges. First, many aspects of social systems are not directly observable. For example, beliefs, values, ambitions, power, and dependency structures often remain hidden within the realm of behavioral architectures. Second, people as actors in systems perceive very different realities. They may, for example, disagree about whether a situation is a problem and for whom, or about how important or urgent the alleged problem is. These aspects reside in problem spaces.

**Behavioral architecture** | Behavioral architectures are those parts of systems that cause situations to be a certain way. Exploring behavioral architectures entails understanding individuals and their relationships to other people, to institutions, and to the physical and natural environment. Accounting for the four dimensions of behavioral architectures—the economic, cognitive, normative, and power/politics dimensions—offers insights across several system levels: individuals, communities, organizations, institutions, and societies. This account helps explain behavioral patterns such as competition, cooperation, exclusion, dominance, and abuse.

For example, consider how powerful elites in a village can exclude certain groups from par-
participating in village decisions. Norms, traditions, and enduring power and dependency structures that maintain persistent inequality in that village often shape this behavioral architecture. The four dimensions of behavioral architectures generate a creative tension between people’s individual aspirations and their social context and material environment. This context influences what they can and cannot do. By examining the behavioral architecture, we can also more easily identify stakeholders who are instrumental to or can block change efforts, such as influential local champions, status-sensitive leaders, and powerful resisters. Organizations I have researched often make progress only when they find ways to unearth the norms, cognitive and economic abilities, or roles and dependencies in which the people they care about have been socialized.

System change requires that we intervene in behavioral architectures (causes), not situations (symptoms). This perspective will help to slow us down, for two reasons. First, important aspects of behavioral architectures are not directly observable. Becoming aware of them and understanding them requires that we get close to the situation of interest and that we establish trust and rapport with stakeholders. Only then will they start sharing aspects of situations and problems that are not readily visible to us, such as the sources of their vulnerabilities and the ways in which they are abused, marginalized, and excluded. This effort often requires doing things that are not in line with an organization’s mission. For example, IDEO.org and Marie Stopes International discovered that addressing the troubling situation of unplanned teen pregnancy in Zambia required investments in unrelated activities, such as opening a nail salon, to build rapport with young girls. Over time, this judgment-free environment enabled the girls to address uncomfortable and contested topics, such as contraceptives and the reasons for their limited adoption.

Second, different behavioral architectures can generate situations that seem similar. We therefore need to suppress our desire to rely on our experience from other contexts, lest we apply familiar situation archetypes that are not at play in the situation at issue. Instead, we must understand the specific behavioral architecture that gives rise to a particular situation of interest. This variance of architectures across seemingly similar situations is what often derails efforts to replicate a solution in different contexts that appear similar on the surface.

Understanding the link between behavioral architectures and situations is central to systems perspectives. But to be effective, we also need to explore how people interpret the same situation constructively and intentionally.

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TAKING SYSTEMS SERIOUSLY

One important argument follows from this overall system architecture: There are no magical objects or forces in systems or powerful levers that we can pull. There is simply a complex social reality. Whenever we refer to a social reality, we always refer to a system, because all individuals, social situations, groups, problems, and power relations are naturally parts of systems. Just using the term “system” without changing the mindset with which we approach troubling situations offers no benefit in terms of explanatory power or intervention design.

A system perspective also implies the coexistence of multiple realities and the need to explore and resolve subjective differences. But sociologists have warned us against falling victim to a naive subjectivism about social problems and against ignoring objective constraints that “affect both the choices that people make and the personal and social consequences of these choices,” as sociologist Robert Merton wrote. Taking situation spaces seriously requires grounding decisions in objective evidence. Taking problem spaces seriously reminds us that...
not all important evidence is objective. Taking behavioral architectures seriously reminds us that not all evidence is visible. From this system perspective, designing intervention strategies in the comfort of one’s home office is obviously an inefficient practice, with close to zero probability of success. Instead, system work requires that we get close to systems, even uncomfortably close. The willingness to enact this slow and difficult work of system change will test our resolve and reveal what we really care about: Do we seek to generate impact to demonstrate our effectiveness, or do we seek to serve communities and help them discover and create their own trajectories of change in their system?

The most important benefit of adopting the system perspective I have outlined may be the reduction and elimination of some pathologies in the philanthropic sector. They include an obsession with technical solutions, a sense of urgency to demonstrate large-scale impact, and the formulation of strategies with prespecified objectives designed by people who are not part of the target system. A system perspective helps us lower the risks of underspecifying problems and situations (a pathology that Johanna Mair and I have called “illusion of understanding”) and of overestimating our ability to intervene in and change situations for the better (a pathology we called “illusion of competence”). These pathologies fuel high levels of enthusiasm and ambition; witness the current wave of big-bets philanthropy. But a widening gap between ambition and competence is all too often a recipe for disaster.

QUESTIONS FOR FURTHER RESEARCH

How do we get better at the hard work of system change? We urgently need more focused research and we need to capture more perspectives and voices from the Global South. This article is a living document that I intend to develop, correct, and expand as I gather new insights. Questions that my research will address and that I hope SSIR readers will help explore in the coming years include: How do we enter and interact with systems effectively? For which types of situations are the assumptions of the four system archetypes most appropriate? What are practices that help unearth and map the dimensions of behavioral situations? How do we build platforms for open communication and for exploring tensions and conflict? How can we adopt the tools of soft- and critical-systems practitioners for philanthropic work? How do we support and stabilize intermediate stages of system change and system transformation processes or risk system collapse?

Adopting system perspectives requires deep reflection and decision making about important aspects of our organizations. This is true no matter whether we are funders, implementers, or both. Following are three conversations that organizations considering system perspectives should have with all their staff. This discussion can launch them into inquiry about their intentions and improving their competencies in system change and thus effective philanthropic work in general.

Mission and Identity | What situations or problems do we pay attention to, and why? Where do we draw boundaries around situations, and what are our limits of responsibility as agents of change? How do we develop our roles, identities, ambitions, and capabilities? What does it mean to adopt a system lens, and what results do we expect? Which of our attitudes and mind-sets will we need to change?

Competencies | How do we evaluate progress, and which areas will we need to master? What if our knowledge and expertise matter little in systems—with what should we replace them? At what pace do funders make decisions about funding? Do we continue to drive rapid cycles of consecutive grantmaking, or should we align the pace of grant cycles with our ability for reflecting on outcomes and learnings from previous grants? How do system perspectives change our relationships with our grantees? Which support structures and competencies do we need to build? How do we develop a practice of soft/critical system approaches? Should this practice become a separate dedicated unit or the way we work in general?

Perspective | How do we explicitly or implicitly look at the world? Do we believe that systems “exist” in the real world? Do we prioritize hard or soft/critical perspectives for our work? Are we committed to a three-dimensional architecture of the sort that I have sketched? If not, what is our way of looking at the world or at systems, and what validates this perspective?

The idea that systems perspectives ideally slow us down is not just cute. Leaders of interventions need to find ways of managing these prolonged learning journeys and to enable the accumulation of deep contextual knowledge to justify their investments. Because this slow approach may not deliver “results” in the short run and thereby risks losing support from staff, funders, and the communities that organizations work with, we must find ways to sustain motivation and a sense of progress. Reducing the pace of decision making, of driving change, of disrupting social orders, and of fueling our appetite to report numbers that demonstrate how good, how smart, and how responsible we are may well be the most useful contribution to making philanthropic work more effective.

Notes

9 Michael C. Jackson, Systems Thinking: Creative Holism for Managers, Chichester, United Kingdom: John Wiley & Sons Ltd., 2003.
10 Seelos and Mair, “Mastering System Change.”
11 Ibid.
14 Peter Checkland has created several practical tools and frameworks to facilitate this work; see also tools and frameworks created by Michael C. Jackson and by Werner Ulrich on critical and emancipatory system approaches.
16 Seelos and Mair, Innovation and Scaling for Impact.
17 Seelos and Mair, “Mastering System Change.”